of the parasite. This is also the case when trypan blue and trypa-flavine are used. These dyes are being tried clinically, and already good results are shown by the use of the trypa-flavine. The cycle of development of the protozoan was studied on blood and cells derived from liver, spleen, and lung punctures. The liver appears to be the main habitat, as well as the spleen and lung, and probably bone marrow. The author believes that spleen puncture is the quickest way to make a diagnosis of trench fever. What carries the infection is undetermined, but it is suggested that the pediculus corporis or perhaps a louse parasite on rats is the agent. The close relationship of the rats and men in the trenches is in favor of this suggestion. The stomach cells of the various kinds of lice found upon the underclothing of the soldiers are at present being examined.

Some Statistical Results of the Treatment of Chest Wounds.—ELLIOTT (*Lancet*, September 8, 1917). The after-history of 170 cases of chest wounds are first considered. These patients had been transferred from France usually in the third week after the wound had been received, or a week or two later if an empyema had been drained by rib resection. The mortality from such wounds is being variously estimated at the present time, but it is certain that all deaths occur in the first month. If this period of time is survived the injury is neither of a fatal nor necessarily of a disabling character. A chest wound may invalid a soldier for two or three months if it is simple, or for any time up to a year if it has been accompanied by a large or by an infected effusion into the pleural cavity. But the ultimate recovery is very good, and few of the survivors of such wounds need to be invalided out of the army. The periods of invalidism are considered with reference to the occurrence of a sterile hemothorax, of empyema, of pneumothorax, and of lung laceration. In all the 170 cases whose histories were followed, it was very rare for any further surgical intervention to be found necessary. There was but one death, and that from an operation, undertaken at the patient's request, for the removal of a bullet. There was, in no case, any fresh effusion that required aspiration. Retained foreign bodies were seldom interfered with, and apparently caused no further trouble. Most lung wounds are accompanied by laceration of greater or less degree, but the evidence from the cases followed seems to show that laceration of the lung tissues are very readily repaired. Scar tissue quickly closes up the defect, and pneumonic inflammation or gangrene does not spread from the neighborhood of the track. A sterile hemothorax of moderate size, about 30 ounces, which does not cause much cardiac displacement, need not be aspirated. In the case of larger effusions, those which were aspirated gave tolerably good results, at least 30 per cent. of them being well again within three months. When such cases remained unaspirated, the late results have been described as being most unsatisfactory, the lung remaining collapsed and the chest expanding very poorly. The retention of foreign bodies in the chest in aseptic cases does not seem to affect recovery, but more extended information is urgently needed on this point. In cases of septic hemothorax, which had been drained in France and transferred to the United Kingdom, the period of convalescence is determined by the size of the cavity and by the nature of the collapse of the lung and the thickness of the fibrin coat overlying it. Much depends on the proper placing of the original drainage opening and a satisfactory removal of carious ribs. It is certain too that systematic breathing exercises combined with antiseptic lavage of the cavity will hasten the closure of the sinus. In empyemata the retention of a shell fragment or other foreign body was seen to have an unfavorable influence on the possibility of the soldier's return to duty, and at least one-third of the empyema cases had ultimately to be discharged from military service as unfit simply on account of the chest condition. The mortality from chest wounds in France are also considered. It has been fully demonstrated that thoracic operations are quite practicable under military conditions in the field. It has been found that the pleural cavity may be freely opened under ordinary local or general anesthesia and the lung manipulated without any fear of immediate physiological disturbances. It is essential that infection shall neither be spread broadcast nor introduced by drainage of the pleural cavity at the end of the operation. However, although the results are often striking they are not always favorable, and comparison by statistics will need to be made with the results of the older more conservative treatment in order to see which kind of chest wounds are best suited for treatment by the new methods. Deaths after chest wounds are caused either by primary hemorrhage or by infection in the chest. All deaths occurring on the first day may be ascribed to the former, while all deaths from the second day onward are due to the latter. Sepsis is twice as frequent with wounds by shell fragments as with those by rifle bullets. About 10 to 15 per cent. die at an early date from the severity of the wound and about 10 per cent. may die later at the evacuation hospital from complicating sepsis. Among those cases developing sepsis within the chest the mortality is very high, rising to nearly 50 per cent. under the present treatment by rib resection and drainage. The old conservative routine of surgical non-intervention, except by late drainage, shows good results in those cases of gunshot wounds of the chest which remain non-infected—that is about 75 per cent. But the septic cases demand the newer practice of prophylactic cleansing operations, performed at an early hour, on certain carefully chosen groups of cases.

Psychological Examining in the Army.—MAJOR M. YERKES, Sanitary Corps, National Army, Section of Psychology, Office of the Surgeon-General says the Medical Department of the Army has undertaken to test thoroughly the military serviceableness of certain methods of psychological examining. This is being done in accordance with carefully formulated plans in four National Army cantonments (Camp Devens, Dix, Lee, and Zachary Taylor) and in one Officers' Training Camp. The methods which are being applied were especially prepared for use in the Army by a Subcommittee of the National Research Council. In order that all enlisted men might be examined expeditiously a procedure suitable for the examining of groups was devised. This permits a single examiner to make measurements simultaneously of the intelligence of from 100 to 200 men. In briefest outline the handling of men by organizations is as follows: A company is reported at a given place for psychological examination. If its strength does not